

IN THE UNITED STATES DISTRICT COURT FOR THE  
EASTERN DISTRICT OF VIRGINIA  
Alexandria Division

SCOTT HOLMES,	)	
	)	
Plaintiff,	)	
	)	
v.	)	Civil Action No.: 1:08-cv-822
	)	
WING ENTERPRISES, INC.,	)	
	)	
Defendants.	)	

**MEMORANDUM OPINION**

This matter comes before the Court because pro se Plaintiff Scott Holmes suffered an unfortunate fall from a ladder manufactured and distributed by Defendant Wing Enterprises, Inc. (“Wing Enterprises”). After Mr. Holmes initiated a lawsuit against Wing Enterprises in the Circuit Court of Fairfax County, Virginia on January 11, 2008, Defendant promptly sought and obtained removal to this Court.

As part of his case, Mr. Holmes seeks to rely on expert testimony in an attempt to prove that the ladder from which he fell was negligently designed by Defendant. Wing Enterprises has moved both to exclude this testimony and for summary judgment. For the reasons stated below, the expert testimony is not reliable under the United States Supreme Court’s *Daubert* standards and shall be excluded. See *Daubert v. Merrell Dow Pharms.*, 509 U.S. 579 (1993). Furthermore, because Mr. Holmes has not properly proved the elements of his negligent design claim, summary judgment is proper.

## I. FACTS<sup>1</sup>

On January 11, 2006, Mr. Holmes was working in Fairfax, Virginia, constructing a second-story addition above the garage of a house. In performing this task, Mr. Holmes used an articulated “Little Giant” ladder to climb to the roof of the structure.<sup>2</sup> The Little Giant ladder was being utilized in its extension (or straight) mode, with the ladder’s feet on the ground, and the top portion of the ladder leaning against the gutter. The ground upon which the feet rested consisted of slanted asphalt. Mr. Holmes, however, neither braced the ladder at the bottom nor tied it at the top.

At one point on January 11, 2006, Mr. Holmes attempted to climb down from the roof of the structure using the ladder. He alleges that he grabbed the ladder and placed one foot on it, but that when he transferred his weight to the ladder, “it buckled outward transferring pressure to the feet causing them to slip away from the house.” Complaint at ¶ 3. Mr. Holmes then fell approximately eleven feet to the ground, suffering serious and permanent injuries. He represents that the last thing he remembers about his fall was stepping off of the roof and onto the ladder. *Holmes Deposition*, 177 (Nov. 17, 2008). Mr. Holmes alleges that “[t]he liability and negligence of Wing Enterprises, Incorporated by building this ladder with a non secure joint and without using proper feet on said ladder is the sole reason for this unfortunate fall.” Complaint at ¶ 5.

In an attempt to prove the elements of his case, Mr. Holmes hired Paul L. Charles as an expert witness to provide an opinion about the design of the Little Giant ladder. Mr. Charles,

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<sup>1</sup> As required, the following facts are viewed in the light most favorable to Plaintiff. *See infra* Section III.B.i.

<sup>2</sup> An “articulated ladder” is comprised of individual segment pieces held together with joints that can lock in place. These joints permit the user to arrange the individual segments in a variety of different positions, a feature which makes an articulated ladder useful in a number of different scenarios. The American National Standards Institute (“ANSI”) defines “articulated ladder” as “[a] portable ladder with one or more pairs of locking articulated joints which allow the ladder to be set up in several modes such as a single or extension ladder, with or without a stand-off, as a regular or double front stepladder, scaffold or work table.” ANSI A14.2-2000 subpart 4 *Definitions and Nomenclature*.

who has worked as a professional engineer and a civil engineering professor at Texas Tech University, performed physical tests on the ladder. These tests involved, *inter alia*, measuring the displacement at the middle joint of the ladder and the deflection at the end. Mr. Charles used the values obtained from this analysis, combined with theoretical scientific principles and specific industry standards, to reach the conclusion that the ladder was negligently designed.

On January 2, 2009, Defendant Wing Enterprises, Inc. moved both for summary judgment and to exclude Mr. Charles' expert testimony. On February 5, 2009, the Court denied the motion for summary judgment without prejudice and notified the parties that it would conduct a *Daubert* hearing before issuing a final summary judgment ruling. At the *Daubert* hearing, which occurred on March 13, 2009, Mr. Charles testified on behalf of Mr. Holmes, and Thomas Bayer testified for Wing Enterprises. Mr. Bayer, who possesses over twenty-five years of experience in the ladder industry and has served as a Product Engineer for the largest ladder manufacturer in the United States, testified that the amount of deflection permitted by the design of the Little Giant ladder was not unreasonably dangerous and was within normal tolerances.

## II. JURISDICTION, VENUE, AND APPLICABLE LAW

The Court has subject matter jurisdiction over this action under 28 U.S.C. § 1332 because the amount in controversy exceeds \$75,000 and the dispute is between parties of different states.<sup>3</sup> Furthermore, venue is proper in this case under 28 U.S.C. § 1391(a)(2) because the event giving rise to the claim at issue occurred in the Eastern District of Virginia. Finally, because Mr. Holmes' accident occurred in Virginia, Virginia state law applies. *See Alevromagiros v. Hechinger Co.*, 993 F.2d 417, 420 (4th Cir. 1993) (“[b]ecause the situs of the accident was Virginia, the law of that state will apply in this diversity action.”).

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<sup>3</sup> At the time the action was commenced, Mr. Holmes was a resident of Alaska, and Wing Enterprises was incorporated in and operated its principal place of business out of Utah.

### III. ANALYSIS

#### A. Defendant's Motion to Exclude Expert Testimony

Mr. Holmes states a products liability claim in his pleadings. More specifically, Mr. Holmes asserts that Wing Enterprises negligently designed the Little Giant ladder, and that this negligent design caused his accident. In support of this claim, Mr. Holmes relies almost solely on the technical expert testimony and analysis of Mr. Charles.

##### *i. Expert Testimony Rules*

Federal Rule of Evidence 702 provides that “[i]f scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise.” Under Rule 702, (1) the expert witness must be qualified; and (2) the methodology by which the expert reaches his opinion must be sufficiently reliable. *See Nimely v. City of New York*, 414 F.3d 381, 396-97 (2d Cir. 2005); *Hudgens v. Bell Helicopters/Textron*, 328 F.3d 1329, 1338 (11th Cir. 2003). Here, because the Court’s analysis under the reliability prong is dispositive, it will not address the qualification prong.

“[C]ourts must recognize that due to the difficulty of evaluating their testimony, expert witnesses have the potential to be both powerful and quite misleading.” *Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 261 (4th Cir.1999) (quoting *Daubert*, 509 U.S. at 595). As a result, the Supreme Court in *Daubert* emphasized that the trial judge must serve as a “gatekeeper” on expert evidence in order to “ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable.” *Daubert*, 509 U.S. at 589; *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999). As the Fourth Circuit has explained, “[a] reliable expert opinion must be based on scientific, technical or other specialized *knowledge* and not on belief or speculation, and

inferences must be derived using scientific or other valid methods.” *Oglesby v. General Motors Corp.*, 190 F.3d 244, 250 (4th Cir. 1999) (citing *Daubert*, 509 U.S. at 592-93); see also *Smith v. Va. Commonwealth Univ.*, 84 F.3d 672, 687 (4th Cir. 1996) (“an expert’s opinion is inadmissible when it is based on assumptions that are speculative and are not supported by the record.”); *Bryte ex rel. Bryte v. Am. Household, Inc.*, 429 F.3d 469, 477 (4th Cir. 2005) (“*Daubert* aims to prevent speculation.”). “Scientific methodology today is based on generating hypotheses and testing them to see if they can be falsified . . . . The statements constituting a scientific explanation must be capable of empirical test.” *Daubert*, 509 U.S. at 593.

The *Daubert* Court provided factors intended to guide lower courts in identifying the level of reliability in expert testimony. Those factors are as follows: (1) whether a theory or technique can be or has been tested; (2) whether the theory has been subjected to peer review and publication; (3) whether a technique has a high known or potential rate of error; (4) whether there are standards controlling the technique’s operation; and (5) whether the theory or technique enjoys general acceptance within a relevant scientific community. *Phelan v. Synthes U.S.A.*, 35 Fed. Appx. 102, 106 (4th Cir. 2002) (citing *Daubert*, 509 U.S. at 592-94). These factors “do not constitute a definitive checklist or test.” *Kumho Tire*, 526 U.S. at 150 (internal quotation marks omitted). “Rather, the inquiry into the reliability of an expert’s methodology must be flexible and case-specific.” See *Simo v. Mitsubishi Motors North America, Inc.*, 245 Fed. Appx. 295, 301 (4th Cir. 2007) (citing *Maryland Cas. Co. v. Therm-O-Disc, Inc.*, 137 F.3d 780, 784-85 (4th Cir. 1998)).

Finally, Mr. Holmes bears the burden of establishing the admissibility of Mr. Charles’ testimony by a preponderance of the evidence. See *Daubert*, 509 U.S. at 592 n.10. Under the preponderance of the evidence standard, the claimant “must present reliable, probative, and

substantial evidence of such sufficient quality and quantity that a reasonable [judge] could conclude that the existence of the facts supporting the claim are more probable than their nonexistence.” *United States Steel Mining Co., Inc. v. Director, Office of Workers’ Compensation Programs*, U.S. Dep’t of Labor, 187 F.3d 384, 389 (4th Cir. 1999); *see also United States v. Gibson*, 309 Fed. Appx. 754, 755 (4th Cir. 2004); *United States v. Kiulin*, 360 F.3d 456, 461 (4th Cir.2004).

Here, Mr. Charles hypothesizes that the Little Giant ladder was designed in an unreasonably dangerous manner because of an unsafe amount of deflection that occurred in the ladder during regular use. Furthermore, Mr. Charles concludes that this allegedly unsafe amount of deflection caused Mr. Holmes’ accident. To reach this conclusion based on the tests and analysis conducted by Mr. Charles, however, requires significant speculation. Therefore Mr. Charles’ expert testimony shall be excluded from this suit as unreliable. The Court’s reasoning for this finding is provided below.

*ii. Mr. Charles’ Analysis*

Mr. Charles based his expert opinion primarily on physical tests that he performed on ladders, Occupational Safety and Health Administration (“OSHA”) regulations, building code regulations, his past education and experience in the engineering field, and theoretical scientific principles. As part of his physical ladder tests, Mr. Charles took displacement and deflection measurements of three different ladders. Specifically, he analyzed two Little Giant articulated ladders, as well as an ordinary unarticulated extension ladder (*i.e.*, a ladder that did not have a joint in the middle). One of the Little Giant ladders used in the testing was the ladder from which Mr. Holmes fell. The other was a near identical model purchased brand new from a store for purposes of performing these tests.

Regarding the testing of the two Little Giant ladders, Mr. Charles set both ladders in their straight-line extension positions (*i.e.*, the ladders were at an angle of 180 degrees) and “fixed” each end of each ladder.<sup>4</sup> At this point, Mr. Charles applied a force to the middle joint of each ladder to see how much displacement occurred from the 180 degree straight-line position. Mr. Charles found that the middle joint of each articulated ladder displaced 2.25 inches and moved 3.2 degrees.

Next, Mr. Charles, still working with the articulated ladders in their straight line extension modes, fixed one end of each ladder and applied a force to the other, free end, measuring how much that free end deflected from the 180 degree straight line mode. He found that the non-fixed end of each ladder deflected 5 inches. Mr. Charles then performed similar tests on the unarticulated straight extension ladder.

The only other significant physical testing that Mr. Charles conducted involved placing the two Little Giant ladders, in their extension modes, against a roof line and partially climbing up in order to experience the effect of the displacement in the middle joint. However, Mr. Charles only went halfway up the ladders because he felt “it was unsafe and [he] didn’t want to fall down.” *Charles Deposition*, 88 (Dec. 16, 2008).<sup>5</sup>

Additionally, Mr. Charles attempted to provide moment calculations.<sup>6</sup> Specifically, Mr. Charles sought to calculate the moment that one would create while operating at the top of a Little Giant ladder. He found that a moment of 125 pound-feet would be created by someone who exerts a force of 50 pounds at the top of the ladder. However, this value of 50 pounds,

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<sup>4</sup> “Fixing” each end of each ladder means securing each end in place so they cannot move during testing.

<sup>5</sup> Mr. Charles also performed this test with the unarticulated straight extension ladder.

<sup>6</sup> In its mathematical and scientific context, the term “moment” means the “tendency . . . to produce motion especially about a point or axis.” MERRIAM WEBSTER’S COLLEGIATE DICTIONARY 750 (10th ed. 1995).

which serves as the basis for the moment calculation, was selected through pure speculation.<sup>7</sup> It necessarily follows that the final moment value calculated by Mr. Charles is also speculative.

Mr. Charles used his physical ladder tests and moment calculations to support his conclusion that the deflection and displacement in the Little Giant ladder combined with the moment created by someone operating at the top of the ladder can cause the ladder's feet to slip. This conclusion is significantly flawed, however, because substantial parts of it are supported solely by speculation and not scientific or objective evidence. Specifically, Mr. Charles attempts to link the deflection and displacement of the ladder to the slippage of the ladder's feet without providing mathematical, scientific, or objective analysis regarding the frictional forces between the feet of the ladder and the ground.<sup>8</sup> Indeed, Mr. Charles failed to perform any calculations involving the estimated coefficient of friction.<sup>9</sup> His frictional force analysis primarily consisted of subjectively concluding that the surface area of each ladder foot was too small to be safe. In sum, Mr. Charles has not provided any calculated mathematical analysis to show that the forces or moments generated by Mr. Holmes while he was using the ladder were sufficient to overcome the frictional forces and cause the feet to slip.<sup>10</sup>

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<sup>7</sup> Opposing counsel asked Mr. Charles the following question in his deposition: "In your report . . . you say that a person stepping onto the roof will 'create a moment of easily 50 pounds (arm and upper body).' How did you arrive at a value of 50 pounds of force for analysis?" Mr. Charles replied, "[c]ommon sense and minimum value" and indicated that he had not relied on any data in generating this value. *See Charles Deposition*, 162-63 (Dec. 16, 2008).

<sup>8</sup> When asked during his deposition, "[d]id you do any tests for either of the Little Giant ladders regarding the forces that would be necessary to make those feet slip?", Mr. Charles replied, "No." *See Charles Deposition*, 120 (Dec. 16, 2008). Mr. Charles made the same representation at the *Daubert* hearing. *See Daubert Hearing*, 42 (March 13, 2009).

<sup>9</sup> When asked "[d]id you do any measurements or calculations that relate in any way to the coefficient of friction for the feet of the Little Giant ladders?", Mr. Charles replied, "No, I didn't." *See Charles Deposition*, 119-120 (Dec. 16, 2008).

<sup>10</sup> Mr. Charles stated that he relied on "experience in construction . . . that's it" when asked about the methodology he used to conclude that the force Mr. Holmes created in using the ladder was sufficient to overcome the frictional forces between the feet and the ground. *See Charles Deposition*, 153 (Dec. 16, 2008). Furthermore, Mr. Charles and Mr. Holmes both represented that the friction calculations were not performed because of funding concerns. *See Daubert Hearing*, 19 (March 13, 2009); *Plaintiff's Memorandum to Keep my Case in Court*, (Dkt no. 18), Jan. 27, 2009. Insufficient funds, however, cannot serve as a justification for overlooking the *Daubert* precedent. Finally, proposed industry tests do exist that are designed to predict the likelihood of ladder foot



In other words, Mr. Charles attempted to tell the story of how Mr. Holmes' unfortunate accident occurred through scientific analysis and mathematical calculation. But he was only able to tell part of the story in this manner (*i.e.*, the portion about the ladder's displacement and deflection). When it came to the crucial analysis of the feet and slippage, Mr. Charles relied solely on pure speculation. *Daubert* aims to prevent such speculative testimony from influencing the trier of fact. *See Bryte ex rel. Bryte*, 429 F.3d at 477; *Smith v. Va. Commonwealth Univ.*, 84 F.3d at 687.

In addition to failing to conduct friction tests on the feet of the ladder, Mr. Charles did not conduct a number of other tests that would help provide a more accurate, objective, and scientific depiction of Mr. Holmes' accident. For example, Mr. Charles did not physically make any measurements when he conducted the field test where he leaned the ladders against the roof and climbed up a few rungs. He merely conducted a "visual examination" where he pushed in on the ladder in order to experience the displacement at the middle hinge, and then arbitrarily estimated that he would have a fifty percent chance of falling if he climbed to the top. *See Charles Deposition*, 236-41 (Dec. 16, 2008). Importantly, Mr. Charles also failed to perform a physical test where he exerted a force at the top of the ladder and attempted to determine how much of that force was required to cause the bottom feet to slip. Furthermore, Mr. Charles ran no tests or calculations regarding how forces and moments change when the ladder is leaned against the house at different angles. *Charles Deposition*, 119-120 (Dec. 16, 2008). Finally, Mr. Charles made no mention in his analysis of seemingly relevant factors such as the weather on the

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slippage. *See ANSI A14.2-2000* subpart 7.3.11 (outlining a detailed "Foot Slip Test."). However, Mr. Charles failed to consult such tests in his analysis.

day of the accident, the slope of the driveway that the ladder was on, or the material of which the driveway is composed.<sup>11</sup>

Mr. Charles also failed to provide an adequate analysis of the relevant safety standards. Some of the most relevant safety standards in a case such as this where the design of a ladder is in dispute are those promulgated by the American National Standards Institute (“ANSI”).<sup>12</sup> In 2000, ANSI, along with the American Ladder Institute, published safety standards targeting metal ladders, including articulated metal ladders such as the Little Giant ladder. *See* AMERICAN NATIONAL STANDARD FOR LADDERS—PORTABLE METAL—SAFETY REQUIREMENTS, ANSI A14.2-2000 (Jan. 14, 2000). These standards identify specific testing requirements for articulated metal ladders. Under these standards, some ladder deflection is permitted. *See* ANSI A14.2-2000 subpart 7.3.

Mr. Charles considered no ANSI standards in the analysis that produced his expert report. Mr. Charles also failed to consider any other type of similar standard specifically targeting articulated ladders. Instead, Mr. Charles considered standards that are much less relevant due to their extreme generality. Specifically, Mr. Charles analyzed OSHA Reg. 1910.26(a)(2), which provides general design specifications for *straight* and *extension* ladders. *See* 29 C.F.R. § 1910.26(a)(2) (1999). This standard makes no mention of *articulated* ladders. Mr. Charles also

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<sup>11</sup> Wing Enterprises’ expert testified that the driveway sloped away from the structure at an angle of seven degrees, and that the weather report on the day the accident occurred for the region in which Mr. Holmes’ worksite was located was overcast with a light drizzle and rain occurring throughout the day. *Expert Report of Thomas E. Bayer*, 3 (Jan. 2, 2009).

<sup>12</sup> ANSI is a non-profit organization comprised of entities such as government agencies, academic bodies, and companies that formally promulgates thousands of safety norms and guidelines. Many federal court opinions have considered ANSI standards when analyzing the safety of ladders, scaffolds, and other similar structures. *See, e.g., Alevromagiros*, 993 F.2d at 419; *Sappington v. Skyjack, Inc.*, 512 F.3d 440, 451 (8th Cir. 2008); *Beaudette v. Louisville Ladder, Inc.*, 462 F.3d 22, 26 (1st Cir. 2006).

included in his expert report some OSHA regulations describing how to properly use portable ladders. While these regulations are relevant for determining how to use a ladder, they do not offer guidance on ladder design or testing.

The most relevant OSHA regulation on which Mr. Charles relies states the following:

When portable ladders are used for access to an upper landing surface, the ladder side rails shall extend at least 3 feet (.9 m) above the upper landing surface to which the ladder is used to gain access; or, when such an extension is not possible because of the ladder's length, then the ladder shall be secured at its top to a rigid support that will not deflect, and a grasping device, such as a grabrail, shall be provided to assist employees in mounting and dismounting the ladder. *In no case shall the extension be such that ladder deflection under a load would, by itself, cause the ladder to slip off its support.*

29 C.F.R. § 1926.1053(b)(1) (1999) (emphasis added). When talking about ladder deflection, however, this regulation is extremely general and provides no specific requirements for permitted deflection amounts or testing procedures.

Instead, the OSHA regulation section from which the above provision was drawn, § 126.1053, refers the reader to the portable metal ladder ANSI standards for further guidance. Even more, this OSHA regulation section states that one who complies with these portable metal ladder ANSI requirements also satisfies 29 C.F.R. § 1926.1053 (1999). *See* 29 C.F.R. § 1926.1053, subpart X, App. A (1999) (“A ladder designed and built in accordance with the applicable national consensus standards, as set forth below, will be considered to meet the requirements of 1926.1053(a)(1): . . . Manufactured portable metal ladders: ANSI A14.2-1982 - American National Standard for Ladders - Portable Metal - Safety Requirements”). This language reinforces the reality that Mr. Charles failed to focus on the proper safety standards. Even the most relevant safety standard Mr. Charles did focus on, 29 C.F.R. § 1926.1053 (1999), was too general to provide adequate guidance.

Finally, Mr. Charles relied on 2000 and 2006 International Building Codes in his report to support his conclusion that the Little Giant ladder deflected in an unsafe manner. Specifically, he cites the Section 1604 of this code, which provides, “Structural systems and members thereof shall be designed to have adequate stiffness to limit deflections and lateral drift.” This provision, however, is not directed specifically towards ladders. Instead, it is directed at structures in general, which may include ladders, but may also include buildings. Furthermore, like the OSHA provision described in the previous paragraph, Section 1604 of the International Building Codes is too general to provide any useful guidance on how a portable metal ladder should be designed.

In sum, Mr. Charles attempted to use OSHA and building code regulations to establish a standard of care in the ladder industry, and then show through physical tests that the Little Giant Ladder fell below that standard. However, the industry provisions Mr. Charles relied on do not contain enough specificity to set a practical and reliable standard of care. Mr. Charles’ standards stand for nothing more than the proposition that deflection in a ladder cannot be so great that it causes the feet to slip and the ladder to fall. To be adequate, Mr. Charles’ standards must at least attempt to assign a numerical value on how much deflection is too much, or include industry accepted deflection ranges. A trier of fact attempting to apply Mr. Charles’ general standard of care is left to engage in significant speculation.

Because Mr. Charles’ proposed standard of care and physical ladder tests are rooted in substantial speculation, as opposed to scientific or technical knowledge, his testimony cannot be characterized as reliable beyond a preponderance of the evidence. *See Oglesby v. General*

*Motors Corp.*, 190 F.3d 244, 250 (4th Cir. 1999) (citing *Daubert*, 509 U.S. at 592-93).

Therefore, the Court shall exclude Mr. Charles' testimony in its entirety.<sup>13</sup>

## **B. Motion for Summary Judgment**

Because Mr. Charles' expert testimony has been excluded, Mr. Holmes has virtually no evidence to prove the essential elements of his case. As explained below, however, Mr. Holmes would not be able to survive the summary judgment stage even if the expert testimony was admissible.

### *i. Standard of Review*

Summary judgment should be granted where the evidence in the record "show[s] that there is no genuine issue as to any material fact and that the movant is entitled to a judgment as a matter of law." Fed. R. Civ. P. 56(c); see *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986). As the Supreme Court has explained, a fact is "'material' only if it might affect the outcome of the suit." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). A dispute over an issue of material fact is "genuine" if "the evidence is such that a reasonable jury could return a verdict for the nonmoving party." *Id.* Finally, in making a summary judgment determination, the court must view the facts in the light most favorable to the nonmoving party. *Matsushita Elec. Indus. v. Zenith Radio*, 475 U.S. 574, 587-88 (1986).

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<sup>13</sup> To be sure, the Court is not excluding Mr. Charles' testimony because he failed to consider ANSI standards in his analysis. Rather, the Court concluded that the standards relied on by Mr. Charles were too general and therefore inadequate. It used relevant ANSI standards as examples to illustrate why.

ii. *Negligent Design Analysis*

As mentioned above, Mr. Holmes states a products liability claim in his pleadings. More specifically, Mr. Holmes asserts that Wing Enterprises negligently designed the Little Giant ladder, and that this negligent design caused his accident.<sup>14</sup> “In order to sustain a products liability claim for negligent design under Virginia law, ‘the plaintiff must prove that the product contained a defect which rendered it unreasonably dangerous for ordinary or foreseeable use.’” *Redman v. John D. Brush and Co.*, 111 F.3d 1174, 1177-78 (4th Cir. 1997) (quoting *Alevromagiros*, 993 F.2d at 420). “In addition, the plaintiff must establish that the defect existed when it left the defendant's hands and that the defect actually caused the plaintiff's injury.” *Alevromagiros*, 993 F.2d at 420. “The product need not incorporate the best or most highly-advanced safety devices.” *Id.*

“In determining what constitutes an unreasonably dangerous defect, a court will consider safety standards promulgated by the government or the relevant industry, as well as the reasonable expectations of consumers.”<sup>15</sup> *Id.* (citing *Sexton v. Bell Helmets, Inc.*, 926 F.2d 331, 337 (4th Cir. 1991) (applying Kentucky law), *cert. denied*, 502 U.S. 820, 112 S.Ct. 79, 116 L.Ed.2d 52 (1991)). When there is no established industry norm, however, “a court is constrained to rely on the opinion testimony of experts to ascertain the applicable safety standard.” *Id.* at 421 (citing *Ford Motor Co. v. Bartholomew*, 224 Va. 421, 430 (1982)). Despite this reliance on expert testimony, the Fourth Circuit does not adopt the rule that “‘it is so if an

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<sup>14</sup> Because of Mr. Holmes' *pro se* status, as well as the lenient notice pleading standards outlined in Fed. R. Civ. P. 8(a), the Court attempts to discern as many claims from Mr. Holmes' complaint as possible. However, the complaint suggests nothing other than a negligent design claim. While Mr. Holmes may have qualified for a strict products liability claim in some states, Virginia does not recognize this tort. *See Sensenbrenner v. Rust, Orling & Neal, Architects, Inc.*, 236 Va. 419, 424 n.4 (“Virginia law has not adopted ' 402A of the Restatement (Second) of Torts and does not permit tort recovery on a strict-liability theory in products-liability cases.”).

<sup>15</sup> “Consumer expectations, which may differ from government or industry standards, can be established through ‘evidence of actual industry practices . . . published literature, and from direct evidence of what reasonable purchasers considered defective.’” *Alevromagiros*, 993 F.2d at 420-21.

expert says it is so.” *Alevromagiros*, 993 F.2d at 422 (quoting *Viterbo v. Dow Chemical Co.*, 826 F.2d 420, 421 (5th Cir.1987)).

Here, the industry-promulgated ANSI standards on portable metal ladders are directly on point and help guide the standard of care analysis in this case. Even if Mr. Charles’ testimony is admissible, Mr. Holmes has presented no evidence that could lead a reasonable juror to conclude that the Little Giant ladder’s design fell below these ANSI standards, or any other relevant standards for that matter. Notably, Mr. Charles’ expert report fails to even mention the ANSI standards.<sup>16</sup> While Mr. Charles did analyze some OSHA regulations and building code regulations, this analysis was not helpful for the reasons stated above in Section III.A.ii (*i.e.*, Mr. Charles’ proposed regulations were too general to provide any useful guidance). Because Mr. Charles’ analysis did not show how the Little Giant ladder fell below any relevant government or industry safety standard, Mr. Holmes has failed to carry his burden on this issue.

Worth noting, Mr. Charles did, in his ladder analysis, compare the Little Giant ladder to a non-hinged, straight extension ladder. However, this comparison, alone, cannot be used to establish the standard of care. *See Alevromagiros*, 993 F.2d at 422 (a plaintiff who “rel[ies] on the opinion of an expert unsupported by any evidence such as test data or relevant literature in the field . . . may not introduce a single example of a competing product and purport to make it a standard for the industry. He or she must establish the violation of industry or government standards, or prove that consumer expectations have risen above such standards.”).

Additionally, Mr. Holmes has failed to offer any material evidence regarding reasonable expectations of consumers or industry custom. For this reason, and for all the reasons in the

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<sup>16</sup> Mr. Charles also failed to provide any meaningful testimony about the ANSI standards at the *Daubert* hearing. When asked about ANSI standards at the hearing, Mr. Charles represented that his involvement with these standards consisted primarily of “glanc[ing] at the ANSI book” the previous day. *Daubert Hearing*, 24 (March 13, 2009)

previous two paragraphs, Mr. Holmes cannot meet the “unreasonably dangerous” element of his negligent design claim, even if Mr. Charles’ expert testimony is admissible.

Finally, Mr. Holmes also cannot meet the “causation” element of his negligent design claim. In order to prove this element, Mr. Holmes must be able to show that the suggested design flaw (*i.e.*, the deflection in the ladder) caused the accident. No other causation theories have been advanced in this case. This result may be due, in large part, to the fact that the last thing Mr. Holmes remembers about his fall was stepping off of the roof and onto the ladder. *Holmes Deposition*, 177 (Nov. 17, 2008).

Causation, in Virginia, cannot be proven by speculative evidence. As the Virginia Supreme Court has explained, “[t]he evidence tending to show causal connection must be sufficient to take the question out of the realm of mere conjecture, or speculation, and into the realm of legitimate inference, before a question of fact for submission to the jury has been made out.” *Virginian Ry. Co. v. Haley*, 156 Va. 350, 381-382 (Va. 1931). As mentioned above, reaching the conclusion that the deflection in the ladder was the cause of the accident from Mr. Charles’ analysis and testimony requires substantial speculation. Even more, when asked “Am I understanding correctly that you did not make an effort to draw an engineering conclusion as to the actual cause of Mr. Holmes’ particular accident,” Mr. Charles replied, “That’s correct.” *Charles Deposition*, 113 (Dec. 16, 2008). For these reasons, Mr. Charles’ analysis and testimony regarding the Little Giant ladder fails to take the causation question out of the realm of conjecture and speculation and into the realm of legitimate inference. *See Virginian Ry. Co.*, 156 Va. at 381-382. Therefore, Mr. Holmes’ negligent design claim cannot succeed, even if Mr. Charles’ testimony is admissible.



Viewing the evidence in the light most favorable to the non-movant, Mr. Holmes failed to prove that the Little Giant ladder was unreasonably dangerous or that a design defect caused his accident, even in the event that Mr. Charles' testimony was admissible. Therefore, no reasonable jury could conclude that Mr. Holmes is entitled to judgment. As a result, summary judgment in favor of Wing Enterprises is now proper.

#### **IV. CONCLUSION**

For the foregoing reasons, both Defendant's Motion to Exclude Expert Testimony and Defendant's Motion for Summary Judgment shall be granted. Accordingly, Plaintiff's negligent design claim shall be dismissed in its entirety.

Entered this 23<sup>rd</sup> day of June, 2009.

Alexandria, Virginia

/s/ [signature]  
Liam O'Grady  
United States District Judge